

FIG. 1

MLATVPSCPLDSRSPSWGSTWLCASGGSWGTASSCMSSSAGRALRGTGDSRHTKMKTATN IYIFNLALADTLVLLTLPFQGTDILLGFWPFGNALCKTVIAIDYYNMFTSTFTLTAMSVD RYVAICHPIRALDVRTSSKAQAVNVAIWALASVVGVPVAIMGSAQVEDEEIECLVEIPAP QDYWGPVFAICIFLFSFIIPVLIISVCYSLMIRRLRGVRLLSGSREKDRNLRRITRLVLV VVAVFVGCWTPVQVFVLVQGLGVQPGSETAVAILRFCTALGYVNSCLNPILYAFLDENFK ACERKFCCASALHREMQVSDRVRSIAKDVGLGCKTSETVPRPA

FIG. 2

MESLFPAPFWEVLYGSHFQGNLSLLNETVPHHLLLNASHSAFLPLGLKVTIVGLYLAVCI GGLLGNCLVMYVILRQCPENPLRGVLRETEERRQHLSLLIPSTNSHSGTPR

FIG. 3

MESLFPAPFWEVLYGSHFQGNLSLLNETVPHHLLLNASHSAFLPLGLKVTIVGLYLAVCI GGLLGNCLVMYVILRQHCALGRSLMNFTGSALKTL

FIG. 4

MESLFPAPFWEVLYGSHFQGNLSLLNETVPHHLLLNASHSAFLPLGLKVTIVGL YLAVCIGGLEGNCLVMYVILRHTKMKTATNIYIFNLALADTLVLLTLPFQGTDI LLGFWPFGNALCKTVIAIDYYNMFTSTFTLTAMSVDRYVAICHPIRALDVRTSS KAQAVNVAIWALASVVGVPVAIMGSAQVEDEGQWAVLLPDQSVPHGSCRPL MLVTAPSCPLDSRSPSWGSTWLCASGGSWGTASSEMSSSAGRALRGTGDSRHTKMKTATN
IYIFNLALADTLVLLTLPFQGTDILLGFWPFGNALCKTVIAIDYYNMFTSTFTLTAMSVD
RYVAICHPIRALDVRTSSKAQAVNVAIWALASVVGVPVAIMGSAQVEDEEIECLVEIPAP
QDYWGPVFAICIFLFSFIIPVLIISVCYSLMIRRLRGVRLLSGSREKDRNLRRITRLVLV
VVAVFVGCWTPVQVFVLVQGLGVQPGSETAVAILRFCTALGYVNSCLNPILYAFLDENFK
ACFRKFCCASSLHREMOVSDRVRSIAKDVGLGCKTSETVPRPA

### FIG. 6

MPATAPSCPSGSRSPSWGSTWPCVSEGSWGTALSCTSSSGRLGPKVPVWHTKMKTATNIY IFNLALADTLVLLTLPFQGTDILLGFWPFGNALCKTVIAIDYYNMFTSTFTLTAMSVDRY VAICHPIRALDVRTSSKAQAVNVAIWALASVVGVPVAIMGSAQVEDEEIÉCLVEIPTPQD YWGPVFAICIFLFSFIVPVLVISVCYSLMIRRLRGVRLLSGSREKDRNLRRITRLVLVVV AVFVGCWTPVQVFVLAQGLGVQPSSETAVAILRFCTALGYVNSCLNPILYAFLDENFKAC FRKFCCASALRRDVQVSDRVRSIAKDVALACKTSETVPRPA

# FIG. 7

MEPLFPAPFWEVIYGSHLQGNLSLLSPNHSLLPPHLLLNASHGAFLPLGLKVTIVGLYL AVCVGGLLGNCLVMHTKMKTATNIYIFNLALADTLVLLTLPFQGTDILLGFWPFGNALC KTVIAIDYYNMFTSTFTLTAMSVDRYVAICHPIRALDVRTSSKAQAVNVAIWALASVVG VPVAIMGSAQVEDEEIECLVEIPTPQDYWGPVFAICIFLFSFIVPVLVISVCYSLMIRR LRGVRLLSGSREKDRNLRRITRLVLVVVAVFVGCWTPVQVFVLAQGLGVQPSSETAVAI LRFCTALGYVNSCLNPILYAFLDENFKACFRKFCCASALRRDVQVSDRVRSIAKDVALA CKTSETVPRPA

(<u>.</u>)

O D D Ogactactaca gtagctatct tgtgcatcg gcattgagg atattaat gacatectt tattggggc ggctccga tcatctct gttcagcca ticggage gttaatgt tcagcaca gctgtgtt gtcaacag ccacag cattact tttagaa D ga ( gtgaca tcaag D cccag gca at cagccgcagc atatcttatc tctgttttgg gctttgcagg ctcaatgcta ggcagccact agctgggagg caacatttac ccagggcaca cattgctatc gcccaggcc gaccgttat catcatgggc gctgctttca ggtagttgtg aggactgggt cctgggctat caaggeetge gagtgagaa acttggct cctcagga ccggttct Ø O ပ ctccttctct cgtctagtca gtactgagtg tcacctgctc cgtggggctc tgtcatcctc agactgctac cactgccctt gcaagacggt ccatgagtgt ര O  $\mathbf{c}$ gtggtgtccg ggctggtact ര C gcattagg ggtcttgta cccaagct catccagta ttcctgttg agateceg ccttcatca acagi tcctggttc atgagaact D tgcaggttt മ tctgcaca ä Ö 0 σ D ctac tgcgcagcc ctggctgctg  $\boldsymbol{\sigma}$ ctttctgcta tggaggaact Ø, ىد ccgtaccca tegteatgta accaagatga gtcttgctga aatgcactgt actttgactg  $\boldsymbol{\omega}$ D ര tgcaagacct cattctggg ccggagcag aggtcacca attctgcgc, gatgttcgg gectagita ttcctttt caggictiti gtggttggt cgacgactt cgcatcaca g t gcttccttg caccgggag ttctccaacc ggctgccgca ccattcccag tcctgcctgc ttcctgccc മ gtgtgctgt മ ggaactgcc ပ tgataccetg gccatttggg cagcactttc cctggcttcg gagatcgag cctcatgatt ത tgcagtagcc ctaaatgag cttggactc cagcaggca ccgtgcct atctgcat aacctgcg acacctgt cattctcta aggccttgg cccatg tccccttct ttcattgtgc gagctaggag cttcctgccc മ tggcactggc D O gccaccctat C tggaggatga ctgtatttgc ס tttggcttc gaagaggtt gagtcct cctgtctct ggggctcct gaactggag tgggcttct acatgitta ccatatggg ga ( tctgctaca gaaggacc gggctgct tctcaatc ccaaggatg gcgtggacc tagtga 021 081 141 241 3.01 361 421 481 541 661 721 781 841 601 901 961

FIG. 9A

gcct · 0 ത ത S tctgtggcct gtcttggctg Ġ c g t g ပ ccactgatg മ g acta Ç CCCa Ø D gC ggc a taccca Ø σ ttcctg; ס gta agcct  $\circ$ ပ ctgcti gggga ttcta cccto acato tgtge cata, gta ctti ctg Œ ď ctgt gtttctcc ဌ gt ത ത actat gtgal actcagtg Ca1 gate Ctt Č. σ Ø D ပ b aggctagca tgaactctt aggagaaaa ttgggtatg ttattctcc ര tagcagcag gttctattc  $\boldsymbol{\sigma}$ gag Ø caaggeet catttgag ctt gttctg gttl ത Ġ Ø gtci g g a + bcti ىد ത g g a Ø D G ď D دد  $\boldsymbol{\sigma}$ 90 tctcagcaag aaaaccactg ggaagtaatc ه د د  $\mathbf{c}$ atctctctcc ф tccai tct ctt ggaagtaat ത cttct ത O catgctggt ggc  $\sigma$ د gtcaggat Q ത tggagcat gtgggttc aaggggac tctcagca gread gtc Ö S cagtaga യ D atat gttt Ç gtt ن ن σ σ σ g tggaccacct ctttccctcc gcacgagact ttttacttga ത taactgtgtg ပ ggagttgcct gtgagcatca ggtgtatatg g ggaggcacca Ø ത ۲ b D agactgg D gcati ند Ca ( gggttag Ø gcctt g Ct g t S gcti نہ D D Ø ā Ø gggctcagct tattgccctc cctgaggtgg gctgtactat တ Jcagggcagg Jcagtcgctc ccttaagctt tctaccaacc ccctaaggct gccctgcttc cacagcat gtagcccgg cttcattta gtate gg ta σ ပ Ö Ō တ atci ത Ö tg( a ta e ത Ct tgaacccatg ggttctaggt tgttgtgtgc gttgcctggc ttcagatta ttcttttcat cactgcctgc cacaaagctt D D D Qaaatgaagag actattacgg ctgtaggctg ctcagtatgg g tgtttggca O ø g cagetet ത Œ gacca aaaca b င် Ü C ັດ ď Ø D g 1621 1681 1741 1981 1981 2041 2161 2221 2281 9 40 S

FIG. 9B

tatgtcatcc gagagagac cactgtgcaa tcttggatga gggagatgca gaggtcttg catcacctg atcgtgggg aggcacacca agatgaagac tgctgacac tgactgcca ttcggacat ttggtgttc tggtggaga ,cacacààc, gacttcgtg tgcgcttct tcagtco cctcgtcatg gaccgtaccc caaggtcacc agagactgag cccattctgg accetggtet tttgggaatg atggtgcctg actttcactt gcccttgatg gcttcggtgg gcatcttcc atgattcgac atcgagtgcc ctgcgacgca cctgtgcagg tagccattc ctctatgctt tctttcctgc tggggaactg gagtcttaag tcctaaatga cccttggact cttctggcca actggctgat gtttaccago attigccatc ccctatccgt atgggccctg ggatgaagag stacageete ctgctggaca gagactgca ggatgtaggc attcacattc caatcccatt ctgtgcttct ggacctgccc gaccggaa atggagtcc gccttcctgc gggggctcc cctctgagag aaccigtctc ttaatctggc tccttctggg actacaacat ctatctgcca cacaagtgga atgtggccat ctctgtctg tgttgtggg gaaagttctg gggccctgt ccgagagaa gccaggtag gcattgccaa gcatctctc tctcttgatt ccttccacaa acagttgtct gactaggcgt tagccacagt gggtgacage ctttcaaggg tgtgtgcatc cctgaaaac atttacatat ggcacagaca gctatcgact cgttatgtag caggccgtta atgggctcag gctatgtca gttctgatca gtgtgcgca gttgtggctg ctgggtgttc gcctgcttta caggactat. cggccggcal ctacttggc caggcagtg agetttgea atggcagcca cctcaatgc tgctaccaac gcccttccag gagtgtagac gacggtcatt cagtaaagcc cacageeetg sccgcccct catcatcccg gaacttcaag ggtttctgat gacagtacca tgttgccat gtccggct ggtactggt ggttcaagg 081 1021 241 8 301 361 421 481 541 561 721 841 901 601 961

**되**요. 10

catcacctgc atcgtggggc tatgicatoc gccctgaaaa catttacata gggcacagac ggttctgatc gggctatgtc agcaccatg ctctcttgat catgggctca gctttcaggc acggccggca tectecetgg gaggtcttgl gtggacatgc tgctatcga ccaggccgt. caggacta ctggggccti agttgtggc actgggtgt ggcctgctt tcgtgtgcg cccattctgg cctcgtcatg ctgctaccaa gaccgtaccc caaggtcacc agacggtcat coccaccc tgcccttcca ccagtaaagc ctgttgccat catcatcc tggttcaagg aggtttctga agattaagtt tacaggcagt cagcatctct gtgtccggct ggtactggt gcacagccct aga.acttcaa agacagtacc agagcccatc aactgagcgt gaagaccttt ccacaactca tctttcctgc gcactgtgca tcctaaatga cccttggact cggggaactg ggagagaga aagatgaaga ttgctgacac gttcggacat gttggtgttc ctggtggaga cgacticgtg gatgaactt ctttttcct atcacacggc gtctttgtcc cgggagatgc gttgaccctg tggctctgtc aagacctctg gtcagtccac agtectagag ctgcgcttct ctcttggatg atggaaacat aacctgtctc gccttcctgc gggggctcc taccctggtc catgattcga ggaagatett gagagactga caggcacacc ctgcatcttc tgccctgcac atttgggaat ggcttcggtg gatcgagtgc cctgcgacgc acctgtgcag ccttggttgc gtggcctcca tgcccttgat aaggaactgc agtagccatt tctctatgct catggtgcct tgctctctag caggatgete ctttcaaggg gcttctggcc gggtgacagc tagccacagt tgtgtgcatc ttgtgcactt ggagtcttaa cactggctga acctatccg aggatgaaga gctgtgcttc cacaggtcac aattcacatt tatttgccat gctacagcct aggaccggaa gctgctggac gtgagactgc aggatgtagg ggacctgcc gagagacca tatgggccct caatcccat cttttggtt aagcatcaag atggcagcca cctcaatgo ctacttggc cagacaaca cctctgaga ccttccaca tttaatctgg atcettetgg actatctgcc aatgtggcca Jcacaagtgg gtgtttgtgg ggggccctg cccgagaga cagccaggta agcattgcca tgactaggcg acggagetea stetetgtet aacagttgtc agaaagttct gaatggcttt 02 [2] 181 241 301 361 421 18 8 841 361 54 30 361 2

1G 11A

aaattctgtg tgatcatacc gactccactg tcatctggta gcaggggac cttattctac atgtgtcttg ttctataccc agcaatctgc tccacagcct cagttgtact ctgtttcctg acagaactgg tcttggatga acttcacact aatcaggaga atgtgttcta catgtagtca ggctcatttg atctagttct caagaggeta actgtgaact ggtcttgggt ctccttattc aggttagcag caagcaaggc ataccttgga agaagagtcg cagtgtttgc gccttggagc tatgaagggg accttctcag ttgacagtag acttgactct ttgtagttgt atcagitgggt tggagtcagg ctccaaaacc aggacatate tgtgggaagt accacatgct gactatctct agcctaaaat ggacattgga cttctaactg tgagagctga agctgaggta ctatggtgta aacctggacc gctcttttac ccgggaagac ttgtaaatg gtgggtgagc ggctctttcc gcatggaggc cagggcacga ttcatggttc cctcagcctt gcttggagtt ttatagggtt agagctggta aggtgggctc gcaagccctg gtgctattgc tggcccttaa attacctgag tcatgctgta ctgctctacc gcttccctaa gctgctcaca atgggcaggg tccagcagtc cacttgtagc cctgcttcat ccttagctc ctggtgaacc ccctggttct cagtgttgcc cgtagaaaca catcaaatga atgcattcag acgattcttt ctgccactgc gctgctcagt. acagtgacca tacctgttgt aagacacaa agactgtttg aaggactatt gcctctgtag 2041 2101 921 981

FG. 11B

.GTACTGAGTGGCTTTGCAGGGTGACAGCATGGAGTCCCTCTTTCCTGCTCCATACTGGGA. GGTCTTGTATGGCAGCCACTTTCAAGGGAACCTGTCCCTCCTAAATGAGACCGTACCCCA CCACCTGCTCCTCAATGCTAGTCACAGCGCCTTCCTGCCCCTTGGACTCAAGGTCACCAT CGTGGGGCTCTACTTGGCTGTGCATCGGGGGGCTCCTGGGGAACTGCCTCGTCATGTA TGTCATCCTCAGCTGGGAGGGCATTGAGGGGGGACTGGAGACAGCAGGCACACCAAGATGA AGACAGCTACCAACATTTACATATTTAATCTGGCACTGGCTGATACCCTGGTCTTGCTAA CACTGCCCTTCCAGGGCACAGACATCCTACTGGGCTTCTGGCCATTTGGGAATGCACTCT GCAAGACTGTCATTGCTATCGACTACTACAACATGTTTACCAGCACTTTTACTCTGACCG CCATGAGCGTAGACCGCTATGTGGCTATCTGCCACCCTATCCGTGCCCTTGATGTTCGGA TTCCTGTTGCCATCATGGGTTCAGCACAAGTGGAAGATGAAGAGATCGAGTGCCTGGTGG AGATCCCTGCCCTCAGGACTATTGGGGCCCTGTATTCGCCATCTGCATCTTCCTTTTTT CCTTCATCATCCCTGTGCTGATCATCTCTGTCTGCTACAGCCTCATGATTCGACGACTTC ATGGTGTCCGTCTGCTTTCAGGCTCCCGGGAGAAGGACCGAAACCTGCGGCGTATCACTC GACTGGTGCTGGTAGTGGTGGCTGTGTTTGTGGGCTGCTGGACGCCTGTGCAGGTGTTTG TCCTGGTTCAAGGACTGGGTGTTCAGCCAGGTAGTGAGACTGCAGTTGCCATCCTGCGCT TCTGCACAGCCCTGGGCTATGTCAACAGTTGTCTCAATCCCATTCTCTATGCTTTCCTGG ATGAGAACTTCAAGGCCTGCTTTAGAAAGTTCTGCTGTGCTTCATCCCTGCACCGGGAGA TGCAGGTTTCTGATCGTGTGCGGAGCATTGCCAAGGATGTTGGCCTTGGTTGCAAGACTT CTGAGACAGTACCACGGCCAGCATGACTAGGCGTGGACCTGCCCATGGTGCCTGTCAGCC CTGAACCTTGAGCATCTGGAGCC

FIG. 12

~GTACTGAGTGGCTTTGCAGGGTGACAGCATGGAGTCCCTCTTTCCTGCTCCATACTGGGAGGTCT TGTATGGCAGCCACTTTCAAGGGAACCTGTCCCTCCTAAATGAGACCGTACCCCACCACCTGCTC CTCAATGCTAGTCACAGCGCCTTCCTGCCCCTTGGACTCAAGGTCACCATCGTGGGGCTCTACTT GCATTGAGGGGGACTGGAGACAGCAGGCACACCAAGATGAAGACAGCTACCAACATTTACATATT TAATCTGGCACTGGCTGATACCCTGGTCTTGCTAACACTGCCCTTCCAGGGCACAGACATCCTAC TGGGCTTCTGGCCATTTGGGAATGCACTCTGCAAGACTGTCATTGCTATCGACTACTACAACATG TTTACCAGCACTTTTACTCTGACCGCCATGAGCGTAGACCGCTATGTGGCTATCTGCCACCCTAT CCGTGCCCTTGATGTTCGGACATCCAGCAAAGCCCAGGCTGTTAATGTGGCCATATGGGCCCTGG CTTCAGTGGTTGGTGTTCCTGTTGCCATCATGGGTTCAGCACAAGTGGAAGATGAAGAGATCGAG TGCCTGGTGGAGATCCCTGCCCCTCAGGACTATTGGGGCCCTGTATTCGCCATCTGCATCTTCCT TTTTTCCTTCATCATCCCTGTGCTGATCATCTCTGTCTGCTACAGCCTCATGATTCGACGACTTC GTGGTGTCCGTCTGCTTTCAGGCTCCCGGGAGAAGGACCGAAACCTGCGGCGTATCACTCGACTG GTGCTGGTAGTGGTGGCTGTTTGTGGGCTGCTGGACGCCTGTGCAGGTGTTTGTCCTGGTTCA AGGACTGGGTGTTCAGCCAGGTAGTGAGACTGCAGTTGCCATCCTGCGCTTCTGCACAGCCCTGG GCTATGTCAACAGTTGTCTCAATCCCATTCTCTATGCTTTCCTGGATGAGAACTTCAAGGCCTGC TTTAGAAAGTTCTGCTGTGCTTCATCCCTGCACCGGGAGATGCAGGTTTCTGATCGTGTGCGGAG CATTGCCAAGGATGTTGGCCTTGGTTGCAAGACTTCTGAGACAGTACCACGGCCAGCATGACTAG GCGTGGACCTGCCCATGGTGCCTGTCAGCCCACAGAGCCCATCTACACCCAACACGGAGCTCACA CAGGTCACTGCTCTCTAGGTTGACCCTGAACCTTGAGCATCTGGAGCC

FIG. 13

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AGCCACCTTCAGGGCAACCTGTCCCTCCTGAGCCCCAACCACAGTCTGCTGCCCCCGCAT CTGCTGCTCAATGCCAGGCACGGCGCCTTCCTGCCCCTCGGGCTCAAGGTCACCATCGTG GGGCTCTACCTGGCCGTGTGTGTCGGAGGGCTCCTGGGGAACTGCCTTGTCATGTACGTC ATCCTCAGGTAGGCTGGGCCCCAAGGTTCCTGTCTGGCACACCAAAATGAAGACAGCCAC CAATATTTACATCTTTAACCTGGCCCTGGCCGACACTCTGGTCCTGCTGACGCTGCCCTT **CCAGGGCACGGACATCCTCCTGGGCTTCTGGCCGTTTGGGAATGCGCTGTGCAAGACAGT** CATTGCCATTGACTACTACAACATGTTCACCAGCACCTTCACCCTAACTGCCATGAGTGT GGATCGCTATGTAGCCATCTGCCACCCCATCCGTGCCCTCGACGTCCGCACGTCCAGCAA AGCCCAGGCTGTCAATGTGGCCATCTGGGCCCTGGCCTCTGTTGTCGGTGTTCCCGTTGC CATCATGGGCTCGGCACAGGTCGAGGATGAAGAGATCGAGTGCCTGGTGGAGATCCCTAC CCCTCAGGATTACTGGGGCCCGGTGTTTGCCATCTGCATCTTCCTCTTCTCCTCATCGT CCCCGTGCTCGTCATCTCTGTCTGCTACAGCCTCATGATCCGGCGGCTCCGTGGAGTCCG CCTGCTCTCGGGCTCCCGAGAGAAGGACCGGAACCTGCGGCGCATCACTCGGCTGGTGCT GGTGGTAGTGGCTGTGTTCGTGGGCTGCTGGACGCCTGTCCAGGTCTTCGTGCTGGCCCA AGGGCTGGGGGTTCAGCCGAGCAGCGAGACTGCCGTGGCCATTCTGCGCTTCTGCACGGC CCTGGGCTACGTCAACAGCTGCCTCAACCCCATCCTCTACGCCTTCCTGGATGAGAACTT CAAGGCCTGCTTCCGCAAGTTCTGCTGTGCATCTGCCCTGCGCCGGGACGTGCAGGTGTC ŦĠĂĊĊĞĊĠŦĠĊĠĊAĠĊAŦŦĠĊĊAAĠĠAĊĠŦĠĠĊĊĊŦĠĠĊĊŤĠĊĄAĠĄĊĊŦĊŦĠAĠAĊĠĠŦ ACCGCGGCCCGCATGACTAGGCGTGGACCTGCCCATG

## FIG. 14

TTGCAGGGCAGTGGCATGGAGCCCCTCTTCCCCGCGCCGTTCTGGGAGGTTATCTACGGCAG CCACCTTCAGGGCAACCTGTCCCTCCTGAGCCCCAACCACAGTCTGCTGCCCCCGCATCTGC TGCTCAATGCCAGCCACGGCGCCTTCCTGCCCCTCGGGCTCAAGGTCACCATCGTGGGGCTC TACCTGGCCGTGTGTCTCGGAGGGCTCCTGGGGAACTGCCTTGTCATGCACACCAAAATGAA GACAGCCACCAATATTTACATCTTTAACCTGGCCCTGGCCGACACTCTGGTCCTGCTGACGC TGCCCTTCCAGGGCACGGACATCCTCCTGGGCTTCTGGCCGTTTGGGAATGCGCTGTGCAAG ACAGTCATTGCCATTGACTACTACAACATGTTCACCAGCACCTTCACCCTAACTGCCATGAG TGTGGATCGCTATGTAGCCATCTGCCACCCCATCCGTGCCCTCGACGTCCGCACGTCCAGCA **AAGCCCAGGCTGTCAATGTGGCCATCTGGGCCTGGCCTCTGTTGTCGGTGTTCCCGTTGCC ATCATGGGCTCGGCACAGGTCGAGGATGAAGAGATCGAGTGCCTGGTGGAGATCCCTACCCC** TCAGGATTACTGGGGCCCGGTGTTTGCCATCTGCATCTTCCTCTTCTCCTTCATCGTCCCCG TGCTCGTCATCTCTGTCTGCTACAGCCTCATGATCCGGCGGCTCCGTGGAGTCCGCCTGCTC TCGGGCTCCCGAGAGAAGGACCGGAACCTGCGGCGCATCACTCGGCTGGTGCTGGTGGTAGT GGCTGTGTTCGTGGGCTGCTGGACGCCTGTCCAGGTCTTCGTGCTGGCCCAAGGGCTGGGGG TTCAGCCGAGCAGCGAGACTGCCGTGGCCATTCTGCGCTTCTGCACGGCCCTGGGCTACGTC **AACAGCTGCCTCAACCCCATCCTCTACGCCTTCCTGGATGAGAACTTCAAGGCCTGCTTCCG** CAAGTTCTGCTGTGCATCTGCCCTGCGCCGGGACGTGCAGGTGTCTGACCGCGTGCGCAGCA TTGCCAAGGACGTGGCCTGGCCTGCAAGACCTCTGAGACGGTACCGCGGCCCGCATGACTA GGCGTGGACCTGCCCATG

FIG. 15

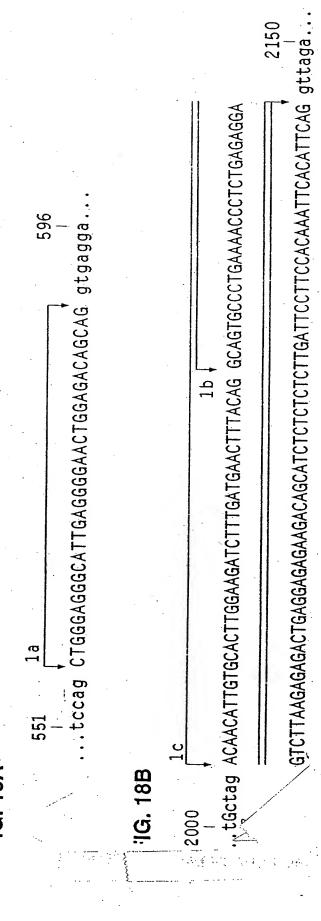
(14)对约 的经材物(94)

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mKOR	3D	MESLFPAP	<b>FWEVLY</b>	'GSHFQ	GNLSL	LNETV	PH	HLLLN	ASHSA	FLPLGL	KVTIV	GLYLAV	CI
		:: :::::	:::::	::::	:::::	:	:	:::::	::::	:::::	:::::	:::::	:
hKOR	3D	MEPLFPAP	FWEVIY	'GSHLQ	GNLSL	LSPNH	SLLPP	HLLLN.	ASHGA	FLPLGL	KVT <u>IV</u>	GLYLAV	CV
		•											
			70		0		0	10		110			23
mKOR	3D	GGLLGNCL	VMHTKM	1KTATN	IYIFN	ILALAD	TLVLL	TLPFQ	GTDIL	LGFWPF	GNALC	KTVIAI	DY
	2	:::::::	::::::	:::::	:::::	:::::	:::::	:::::	:::::	:::::	:::::	::::::	::
hKOR	3D	GGLLGNCL	<u>VMHTK</u> M	1KTATN	IYIFN	ILALAD			GTDIL	<u>L</u> GFWPF	GNALC	KT <u>VIAI</u>	DY
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hKOR	30 :	YNMFTSTE		<u>SV</u> UKYV	AICHE	'I KALU	AK122	KAUA V	NVAIW		GVPVA	IMGSAU	IVE
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mKOR	30	DEELECTA											
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hKOR	30	DEEIECL										GSREKE	IRN
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		2	260	27	70	28	3O	29	0	300	) .	. 3	313
mKOR	3D	LRRITRL	LVVVA	VFVGCV	VTPVQ\	/FVLVC	GLGVO	PGSET	AVAIL	RFCTAL	GYVNS	CLNPIL	YA
			::::::	::::::	:::::	:::::	:::::	: :::	:::::	::::::	:::::	::::::	
hKOR	3D	LRRITRLY	LVVVA	VFVGCV	VTPVQV	FVLAC	GLGV	PSSET	AVAIL	RFCTAL	GYVNS	CLNPIL	YA
•				VI					· <del>.</del>	4 1		VII	
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mKOR	3D	FLDENFK	ACFRKF	CCASAI								. •	
		::::::			~					::::::			
hKOR	3D	FLDENFK	ACFRKF	CCASAI	LRR <b>DV</b> (	OVSDRI	/RSIAI	KDVALA	CKTSE	TVPRP	4 95%	: Ident	tity

FIG. 16

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		- 10	20	30	40	50	60
mKOR	3A	MLATVPSCPLDSR	SPSWGSTWLCA	ASGGSWGTASS	SCMSSSAGRAL	RGTGDSRHT	KMKTATN
rKOR	3A	MLVTAPSCPLDSR	SPSWGSTWLC	ASGGSWGTASS	SCMSSSAGRAL	RGTGDSRHT	::::: KMKTATN
		: :::::: ::	:::::::::::::::::::::::::::::::::::::::	: ::::::	:: ::: :: :		::::::
hKOR	3A	MPATAPSCPSGSR	SPSWGSTWPC	VSEGSWGTALS	SCTSSS GR-L I	GPKVPVWHT	KMKTATN
-					_		
	•	70	80	90	100	110	120
mKOR	3A	IYIFNLALADTLV	LLTLPFQGTD	ILLGFWPFGNA	ALCKTVIAIDY	YNMFTSTFT	LTAMSVD
rKOR	3A	IYIFNLALADTLV	LLTLPFQGTD	ILLGFWPFGNA	ALCKTVIAIDY	YNMFTSTFT	LTAMSVD
			::::::::	• • • • • • • • • •	:::::::::::::::::::::::::::::::::::::::	::;:::::	:::::::
hK0R	3A	IYIFNLALADTLV		I LLGFWPFGNA	ALCKTVIAI:DY		LTAMSVD
		. 11	•	.*		III	
		130	140	150	160	170	180
mKOR	3A	RYVAICHPIRALD	VRTSSKAQAV	NVAIWALASVI	VGVPVAIMGSA	OVEDEEIEC	LVEIPAP
~ WAA	24	DVVATCHDIDALD	VDTCCVA CAN				:::::::
rKOR	3A	RYVAICHPIRALD	VRISSKAUAVI	NAVIMALAZA	VGVPVAIMGSA	UVEDEETEC	LVEIPAP
hKOR	3A	RYVAICHPIRALD	VRTSSKAOAV	NVAIWALASV	VGVPVAIMGSA	OVEDEFIEC	IVFTPTP
				IV			
		100	222	0.1.0	مفه		
mKOR	3Δ	190 QDYWGPVFAICIF	200 LESELIDALI	210 TSVCVSLMTDI	220 DÍ DOVDI I SOS	230	240
micorc	<b>Э</b> Д	::::::::::::	::::::::::		::::::::::		
rKOR	3A	ODYWGPVFAICIF	LFSFIIPVLI	ISVCYSLMIR	RLRGVRLLSGS	REKDRNLRR	ITRLVLV
L VAD	24	ODVICTOR			::::::::::::		*******
hKOR	3A	QDYWGPVFAICIF	CESEIABACA:	T2AČA2FWTKI	RERGVREESGS	REKUKNLKK	IIKLVLV
			•				* 1. :
		250	260	270	280	290	300
mKOR	3A.	VVAVFVGCWTPVQ	VFVLVQGLGV	OPGSETAVAI	LRFCTALGYVN	ISCLNPILYA	FLDENFK
rKOR	34	VVAVFVGCWTPVQ	VEVI VOGLGV	CPGSETAVATI	I PECTAL GYVA	CCL NDTEVA	EL DENEK
·	JA.	:::::::::::			•		
hKOR	3 <b>A</b>	VVAVFVGCWTPVQ				SCLNPILYA	
		VI				VII	
		310	320	330	340		
mKOR	3A	ACFRKFCCASALH					
			:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::			
rKOR	3A	ACFRKFCCASSLH	•		KTSETVPRPA	99% Id	entity
hKOR	3A	ACFRKFCCASALR			KTSFTVPRPA	91% 17	lentity
	•				02. 41 14 1	210 10	



TGGGCAGTCCTCCTCCTGACCAATCAGTTCCCCATGGTTCTTGCCGGCCCCTCTGACCTCATTTCTCTCTGCAG

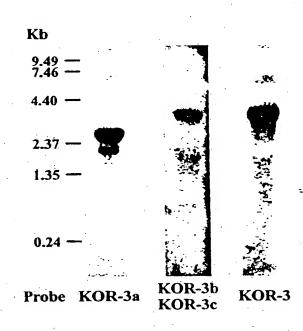


FIG. 19

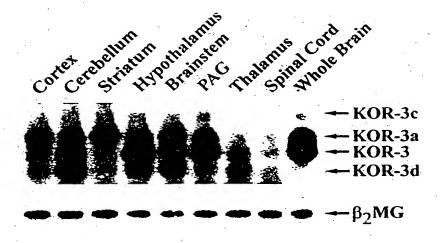


FIG. 20